

REMARKS

Claims 1-19 are pending in this application, of which claims 15-19 have been allowed and claims 4, 5 and 8 have been withdrawn from consideration. Claims 1-3, 6 and 9-12 have been rejected and objection has been made to claims 7, 13 and 14. Claims 1-19 will remain pending in this application. The Examiner is respectfully requested to reconsider and withdraw the outstanding rejections in view of the remarks contained herein.

OBJECTION

Claims 7, 13 and 14 were objected to as being dependent upon a rejected base claim. However, the Office Action indicates that these claims would be allowable if rewritten in independent form. Applicants acknowledge with appreciation the indication of allowable subject matter in claims 7 and 13-19. Applicants respectfully submit that the rejection of base claims 1 and 6 has been overcome as discussed below. Therefore, Applicants respectfully request withdrawal of the objection to claims 7, 13 and 14.

REJECTIONS UNDER 35 U.S.C. §§ 102 and 103

Claims 1-3, 6 and 9 were rejected under 35 U. S. C. § 102(b) as allegedly anticipated by Katz (US 5,038,113). Claims 10 and 11 were rejected under 35 U. S. C. § 103(a) as being unpatentable over Katz in view of Yun (US 5,914,641) and further in view of Fukuden (US 5,805,023). Claim 12 was rejected under 35 U. S. C. § 103(a) as being unpatentable over Katz. Applicants respectfully submit that these rejections are traversed without the need for substantive changes to the claims.

Claim 1 recites the following features: a specific-frequency suppressing means connected to one side or both sides of said nonlinear device directly without another intervening device, said specific-frequency suppressing means suppressing all or part of such frequencies that are from a frequency corresponding to DC to a frequency corresponding to an occupied band width of an input signal inputted to said input terminal. Katz fails to teach or suggest these features.

According to Applicants, Katz requires that the impedance of the radio-frequency chokes 1124 (or 1125) viewed from the electrode 82 (or 84) has to be high at the frequency of an input signal inputted to the input port 90. Specifically, Katz states that “if one or both of matching networks 1119 and 1122 blocks direct current e.g. if it includes a series capacitor, one or both bias tees illustrated as a radio-frequency chokes 1124 and 1125 may be connected from electrode 82 and 84 to ground, if desirable” (see Katz’s specification in the paragraph bridging col. 8 and 9). Katz further states that “in some cases, having one or the other of electrodes 82 or 84 blocked from ground for the flow of direct current may enhance operation” (again, see Katz’s specification in the paragraph bridging col. 8 and 9). As such, Applicants believe that the radio-frequency chokes 1124 and 1125 cannot suppress all or part of such frequencies that are from a frequency corresponding to DC to a frequency corresponding to an occupied band width of an input signal inputted to the input port 90. This is because the impedance of the radio-frequency choke 1124 (or 1125), as viewed from the connection point at which it is connected, is not lower than the impedance of the nonlinear device, as viewed from the same connection point, at all or part of such frequencies from the frequency corresponding to DC to the frequency corresponding to the occupied band width. To the contrary, in Katz, the inductance L (or the frequency ω_m corresponding to the occupied band width) is large when the impedance $j\omega_m L$ tends to be high. Therefore, Katz fails to teach or suggest a specific-frequency suppressing means that suppresses

all or part of such frequencies that are from a frequency corresponding to DC to a frequency corresponding to an occupied band width of an input signal inputted to said input terminal, as required in the present invention. Hence, Applicants respectfully submit that the present invention is not anticipated because Katz fails to inherently or explicitly disclose each and every feature of the invention as set forth in claim 1.

In addition, Applicants respectfully submit that the present invention is not made obvious by Katz singly, or in any combination with Yun and Fukuden. Neither Yun nor Fukuden remedies the above-described deficiencies of Katz with respect to claim 1. As such, claims 10, 11 and 12 which depend from claim 1 are likewise patentably distinguishable over Yun and Fukuden. Moreover, it is respectfully submitted that there is nothing in the cited documents that would have motivated those of ordinary skill in the art to have combined the teachings of the cited art in any way that would render the claimed invention obvious. As such, Applicants respectfully urge that the asserted rejections over Katz alone, and Katz as allegedly combined with Yun and Fukuden, are overcome. Withdrawal of the rejections under both 35 U.S.C. § 102 and 35 U.S.C. § 103 is requested. Applicants respectfully further request that withdrawn claims 4, 5 and 8 be rejoined in light of the allowability of claim 1.

CONCLUSION

Applicants respectfully submit that the above remarks obviate the outstanding objection and rejections in this case, thereby placing the application in condition for immediate allowance. Allowance of this application is earnestly solicited.

If any fees under 37 C. F. R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300, Order No. 033216M067.

Respectfully submitted,
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